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(54) Interference suppression in RF signals

(57) An I/Q direct conversion receiver has an input (5,6) for receiving an RF signal comprising a wanted signal having in-phase and quadrature phase channels modulated onto in-phase and quadrature carrier signals. A signal splitter (7) divides the receiver RF signal into three in-phase signal components. Three substantially identical mixers (8) are provided and receive respective RF signal components for mixing with local oscillator signals. The first mixer (8a) receives the local oscillator signal shifted by 45°, the second mixer (8b) receives the local oscillator signal shifted by -45°, whilst the third mixer (8c) receives the local oscillator signal shifted by 180°. A correction signal is generated by summing at a summing amplifier (11) the first and second baseband signals together with the third baseband signal after appropriate scaling. The in-phase and quadrature phase baseband signals are then corrected by combining these signals at respective comparators (13) with the correction signal.

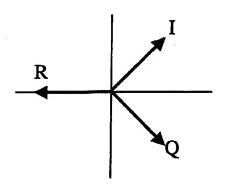


Figure 3



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Application Number EP 98 10 4081

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ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO.

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